UNIVERSITY OF YORK

DEPARTMENT OF COMPUTER SCIENCE

ENG1 Assessment 2
Group 18 - Octodecimal

User Evaluation

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Method for user evaluation: a)

In Task Based User Evaluation (TBUE), we started by recruiting some participants. This was done by selecting group 13 as participants during our practical class in week 11. They were ideal participants because our game was designed for students to be familiar with University life which meets one of the requirements. Each one of our group members interviewed one student in group 13 and informed them of all the things that they should know before starting the evaluation including filling in a consent form, type of task, and encouraged the users to think aloud. Then, after they agreed to participate, we gave them a set of tasks to do including start a new game, familiarise with controls, turn down the music volume, perform all 4 task types, find 3 different recreational activities, obtaining an achievement by talking to the hidden tree, perform an activity while energy is low, view the score breakdown, view achievements, view the leaderboard and exit the game. This can be found on the interview structure at URL After that, we prepared an environment for users to start playing the game, assisting and evaluating the participant during the test.

Next, we built the finalised version of our system that we wanted to test; this only lasted 2 days in-game time. This is because we wanted to test a crucial part of the system only, without repeating the gameplay for another 5 days, whilst ensuring we tested enough of the game to get adequate results. We ran the evaluation with users by using observation & interview techniques. For observations, we use Atomic Hypotheses because it is very simple (yes or no response) and easy to understand. It is also useful for design changes because we know exactly what isn't working. Our Atomic Hypotheses includes things like: player entered a correctly formatted name, player was able to control the game, player found out how to sprint, player was able to navigate around the map etc. For Interview questions, we separated each question into awareness and execution questions.

For awareness, it consists of questions like "Does the map layout resemble campus to you", "Did you read the how to play box". Meanwhile, execution questions consist of "Did you have any trouble navigating the map?", "Did you realise you could sprint?". We also encouraged them to think aloud, pushing the Concurrent Verbal Protocol (CVB) to get their personal perspective and view of our system. Then, as part of our ethical duty we debriefed them by letting them know what they took part in, why they took part in this, what their data is going to be used for, who will see it and let them ask us questions.

After completing this, we compiled our data in google form (for informed consent form), and google docs (for summarising our findings). Finally, we improved our design after taking user evaluation. There are 5 problem summaries that we found during the interview that need to be solved in our design. The usability problem table can be found at the bottom of this document.

Our persona is Alex. Alex is a shy 18 year-old aspiring computer science student who is considering going to university to study computer science further, as is specifically considering the University of York. He enjoys playing video games and has a passion for programming in his spare time. He wants to see if he would be able to adjust to life at university before applying as he has bad time management skills and tends to get lost a lot due to his poor sense of direction. He is worried about getting lost on campus and getting late to his lectures.

Alex plays the game on an open day at the university, in the computer science building, with the aim of familiarising himself with the layout of campus east. Playing this game allows him to get a better understanding of university life on a day to day basis. He is also able to make better informed decisions on whether they wish to go to university or not and have a better knowledge of campus east, such as places to study, eat, relax and activities the university provides. He was also able to improve his social skills by sharing his high scores with other aspiring students and overcome his shyness.

Usability problems table

Problem ID	Problem Summary	Problem Description	Possible Solution	Severity Rating
1	Unclear how to sprint.	Users did not grasp instantly how to sprint, and in some cases needed telling by the team member evaluating, on how to sprint.	Add a controls introduction along with the “how to play” screen.	3
2	Sprinting too fast?	Some users felt the characters were sprinting too fast, especially through diagonals.	Reduce the characters sprint speed, specifically in diagonals	1
3	Camera view is too small.	Users felt that the camera view was too zoomed in, and as a result, didn’t show enough of the map.	Zoom the camera out further, so more of the map can be seen.	2
4	Can get to the next day without sleeping.	“Feeding the ducks” activity has a disproportionately high amount of time taken when compared to the energy it takes, meaning that if a player repeated this activity, they could make it to the following day, with energy to spare.	Reduce the time taken for the “feeding the ducks” activity to 1 hour from 2 hours.	3
5	Achievement wasn’t adding to the final score count	Completing an achievement shows a “+100” score at the end of the game summary but does not add the score to the final count.	Fix how achievements are added and proper grant scores	4

To keep consistent with the CVP we used previously, we used a numerical 1-4 scale for the severity ratings for the problems that we found during user evaluations. A rating of 1 represents a cosmetic problem, something that may only be visual or slightly hinders the user in completing a task, nothing more. A rating of 2 is a minor problem, a small issue that may give a user some difficulty in completing a task. Next, a rating of 3 represents a major problem, this gives the user a lot of difficulty in completing a task. Finally, a rating of 4 is a catastrophic problem, something that stops the user from completing the task altogether.